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EXAMINER

JARRETT, SCOTT L

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3624

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/797,785
Filing Date: March 08, 2004
Appellant(s): FINE ET AL.

Mr. John P. Wagner
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 13, 2010 appealing from the Office action mailed October 20, 2009.

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(1) Real Part of Interest

A statement identifying by name the real part of interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

1 and 3-24.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

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(8) Evidence Relied Upon

7,155,510	Kaplan	12/2006
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5,608,620	Lundgren	3/1997
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Sarin, Rakesh K, An Approach for Long Term Forecasting with an Application to Solar Electric Energy (Management Science, Vol. 25, No. 5, June 1979)

Pennock et al., The Power of Play (NEC Research Institute Technical Report 2000-168; February 17, 2001)

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6, 8-14 and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan, U.S. Patent No. 7,155,510 in view of Sarin, Rakesh K. An Approach for Long Term Forecasting with an Application to Solar Electric Energy (1979).

Regarding Claims 1, 10, 19 and 22 Kaplan teaches a method and system for forecasting comprising:

- creating an (information, decision, prediction, matching, betting, trading, wagering, speculative, virtual, idea, event derivatives, etc.) market to determine the participant characteristic (Column 6, Lines 5-12, 40-68; Column 7, Lines 1-25; Column 8, Lines 9-15, 43-60; Column 10, Lines 12-34; Column 11, Lines 22-26);
- determining at least one participant characteristic of a participant based on the participants behavior within the market (e.g. WPSE; Column 4, Lines 49-52; Column 5, Lines 32-40; Column 6, Lines 64-68; Column 7, Lines 1-26; Column 8, Lines 9-14);

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- defining predictions each corresponding to a probability associated with an expected outcome (Column 6, Lines 40-55);
- performing a query process with the probability as assets (information, securities, financial instruments, etc.; Column 4, Lines 30-68; Column 5, Lines 1-8; Column 6, Lines 5-24; Column 9, Lines 5-12);
- aggregating a result of the query process with weighting for the participant characteristic (WPSE, CPI; Column 6, Lines 5-12, 40-68; Column 7, Lines 1-25; Column 8, Lines 9-15, 43-60; Column 10, Lines 12-34; Column 11, Lines 22-26).

While providing probabilities forecasts for various possible/expected outcomes, e.g. probability bins, buckets, classes, ranges of expected outcomes, rain/no rain) is old and very well known (see for example: Plott et al., Information Aggregation Mechanisms: Concept, Design, and Implementation For A Sales Forecasting Problem (2002): Paragraphs 3-4, Page 6; Paragraphs 2-3, Page 7; Plott, Markets as Information Gathering Tools (2000): Section 3, Pages 12-13; "Since these prices must range from 0-100, they can be interpreted as probabilities. Thus, the price of 9 in the market SEP-LOW-1500 can be interpreted as the "market belief" that the probability is 0.09 that the September sales will be in the range of 0-1500. With the interpretation of prices as probabilities, the model state is 1901-2100 with a probability of 0.22..." Paragraph 1, Page 13).

While Kaplan teaches defining a plurality of expected outcomes and associating probability with each Kaplan does not expressly use the phrase "probability bins" as

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claimed (see range of potential definitions recited in Applications specification: Paragraphs 55, 58; Figure 6).

Sarin teaches defining probability bins each corresponding to a probability associated with an expected outcome (scenarios, probability distributions; Abstract; Paragraphs 1-2, Page 546; Paragraph 1, Page 547; Last Paragraph, Page 550) in an analogous art of forecasting for the purpose of predicting/forecasting alternative projections/scenarios (Paragraph 2, Page 544; Paragraph 1, Page 553).

Sarin further teaches a system and method for forecasting comprising: performing a query process with the probability bins and aggregating a result of the query process with weighting for individual participant characteristic(s) (Section 8, Pages 551-552).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for forecasting as taught by Kaplan would have benefited from defining probability bins having an associated probability in view of the teachings of Sarin; the resultant system/method enabling users to forecast alternative scenarios/outcomes (Sarin: Paragraph 2, Page 544).

Further since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Regarding Claims 9, 11, 20 and 23 Kaplan teaches method and system further comprising conducting an market (information, decision, prediction, matching, betting, trading, wagering, speculative, virtual, idea, event derivatives, etc.) to determine the participant characteristic (Column 6, Lines 5-12, 40-68; Column 7, Lines 1-25; Column 8, Lines 9-15, 43-60; Column 10, Lines 12-34; Column 11, Lines 22-26).

Regarding Claims 3-4, 13, 18 and 21 Kaplan teaches a forecasting system and method further comprising determining the mean, average and other common statistical/mathematical parameters associated with the forecasts/probabilities associated with the expected outcomes (Column 56, Lines 4—53; Column 11, Lines 22-30).

Kaplan does not expressly teach probability bins as claimed.

Sarin teaches defining a center probability bin and defining the probability bins with increasing variances from the center probability bin outward and providing a mean estimate as the center probability bin (Paragraphs 1-2, Page 550; Paragraph 2, Page 552; Table 7) in an analogous art of forecasting for the purpose of predicting/forecasting alternative projections/scenarios (Paragraph 2, Page 544; Paragraph 1, Page 553).

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It would have been obvious to one skilled in the art at the time of the invention that the system and method for forecasting as taught by Kaplan would have benefited from defining probability bins having probabilities associated with expected outcomes as well as defining a center probability bin in view of the teachings of Sarin, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Regarding Claims 5 and 14 Kaplan teaches a method and system wherein the further comprising historical (true, actual, measured, factual, etc.) data associated with the forecasts (probabilities associated with expected outcomes; Column 4, lines 50-53; Column 9, lines 26-34; Column 11, Lines 15-17) for the purpose of comparing participant's forecasted data with actual/true historical data related to the expected outcome.

Kaplan does not expressly teach subdividing data (forecasts, predictions, expected outcomes, etc.) into probability bins as claimed.

Sarin teaches subdividing forecasts/data into probability bins (scenarios, probability distributions; Abstract; Paragraphs 1-2, Page 546; Paragraph 1, Page 547; Last Paragraph, Page 550) in an analogous art of forecasting for the purpose of

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predicting/forecasting alternative projections/scenarios (Paragraph 2, Page 544; Paragraph 1, Page 553).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for forecasting as taught by Kaplan would have benefited from defining probability bins (subdividing predictions/forecasts) in view of the teachings of Sarin; the resultant system/method enabling users to forecast alternative scenarios/outcomes (Sarin: Paragraph 2, Page 544).

Further since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Regarding Claims 8 and 17 Kaplan teaches a method and system wherein the weighting includes individual participant prediction for the participant and the query process as a whole (Column 7, Lines 1-25; Column 8, Lines 9-15, 43-60; Column 10, Lines 12-34; Column 11, Lines 22-26).

While Kaplan teaches that any of a plurality of none weighting schemes could be used (Column 14, Lines 56-60) Kaplan does not expressly teach utilizing exponential factoring for the participant characteristic and the query process as a whole as claimed.

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Official notice is taken that exponential factoring is an old and well know mathematical/statistical technique, method and/or approach. Common exponential factoring in forecasts include exponential weighted averaging, exponential smoothing factors, MACD (exponential) and the like.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for forecasting as taught by the combination of Kaplan and Sarin would have benefited from utilizing any of a plurality of weighting factors including but not limited to exponential smoothing in view of the teachings of official notice; since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claims 6-7 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan, U.S. Patent No. 7,155,510 in view of Sarin, Rakesh K. An Approach for Long Term Forecasting with an Application to Solar Electric Energy (1979) as applied to claims 1-6, 8-14 and 17-23 above, and further in view of Pennock et al., The Power of Play (2001).

Regarding Claims 6-7 and 15-16 Kaplan teaches providing an web-based software application to facilitate forecasting (Column 5, Lines 25-40)

Kaplan does not expressly teach wagering by participants on an expected outcome as claimed.

Pennock et al. teach a method and system further comprising wagering (betting) by the participant on the expected outcome as well as facilitating participant wagering by providing a web-based software application (HSX, FSX; Paragraphs 2-3, Last Paragraph, Page 5; Last Paragraph 3, Paragraph 1, Page 4; Last Paragraph, Page 16; Paragraph 1, Page 17) in an analogous art of forecasting.

It would have been obvious to one skilled in the art at the time of the invention that the forecasting system and method as taught by Kaplan would have benefited from enabling participants to wager/bet on expected outcomes in view of the teachings of Pennock et al. since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claim is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan, U.S. Patent No. 7,155,510 in view of Sarin, Rakesh K. An Approach for Long Term Forecasting with an Application to Solar Electric Energy (1979) as applied to claims 1, 3-6, 8-14 and 17-23 above and further in view of Lundgren, U.S. Patent No. 5,608,620.

Regarding Claim 24, Sarin teaches determining and accounting for the accuracy of participant's input (forecasts; Column 7, Lines 9-26; Column 8, Lines 9-41) however Sarin does not expressly teach providing rewards to participants as claimed.

Lundren teaches a system and method further comprising: providing a reward (incentive, compensation, payment, bonus, return, etc.) to the participant based on an accuracy of the result of the query process as compared to a corresponding actual asset (Column 1, Lines 64-68; Column 2, Lines 1-22; Column 6, Lines 26-37; Column 20, Lines 9-16; Column 24) in an analogous art of forecasting.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for finance forecasting as taught by the combination of Sarin and Kaplan would have benefited from providing rewards/incentives to participants based on the accuracy of their results in view of the teachings of Lundgren, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

(10) Response to Argument

Applicant's arguments filed April 13, 2010 have been fully considered but they are not persuasive. Applicant's argues that the prior art of record *teaches away from one another* (specifically Kaplan, Sarin, Plott-MIG, Plott-IAM; Page 14; Paragraphs 1-3, Page 15; Paragraph 2, 4, Page 16) and therefore there is no motivation to combine the references (specifically Kaplan, Sarin, Plott-MIG, Plott-IAM; Paragraph 3, Page 13; Paragraph 2, Page 17).

Examiner notes that Applicants do not argue that the applied references do not teach the claimed elements of the instant application, instead the thrust of Applicant's arguments are that the prior art of record teaches away from each other and therefor there is no motivation to combine the applied prior art references.

Initially it is noted that neither Plott et al., Information Aggregation Mechanisms (Plott-IAM) nor Plott, Markets as Information Gathering tools (Plott-MIG) are relied upon in the rejection of the currently pending claims, as rejected under 35 U.S.C. 103(a) detailed in the Final rejection mailed October 20, 2009.

Plott-IAM and Plott-MIG are recited on page 8 of the Final office action mailed October 20, 2009, but this citation was merely to reinforce examiner's assertion that probability bins are old and well known as first provided to the applicant in the Non-Final Office Action mailed May 21, 2009 (Bullets 1-2, Page 8) to provide support for the officially cited fact that it is old and very well known to provide probabilities for various

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expected outcomes (i.e.. probability bins as claimed). Examiner notes that three additional references were also cited in the office action mailed May 21, 2009 to provide support for this officially cited fact (Last Three Bullets, Page 7).

Ultimately only Sarin was relied upon for teaching “probability bins” (Final office action; Paragraph 2, Page 9).

If Applicant’s are attempting to traverse the officially cited facts in the previous office action(s) it is noted that Applicant’s previous attempt(s) to traverse the officially cited facts have been deemed untimely and inadequate (see at least: Final Office Action mailed October 20, 2008, Last Paragraph, Page 2; Page 3).

Further it is noted that independent claims 1, 10, 19 and 22 are rejected under 35 U.S.C. 103(a) over Kaplan in view of Sarin and *not* in view of official notice. Only dependent claims 8 and 17 remain rejected under official notice.

Accordingly Examiner will only address applicant’s arguments as they relate to the Kaplan and Sarin references applied in the Final rejection mailed October 10, 2009.

In response to applicant’s argument that the prior art of record teaches away from another, the examiner respectfully disagrees.

Specifically Applicant’ argues that Kapln requires non-expert investors and therefore teaches away from the experts required by Sarin (Paragraph 2, Page 9; Paragraph 2, Page 16).

Initially it is noted that whether the participants are or are not “*experts*” is moot as the currently pending claims, nor in the Applicant’s specification, is there any

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requirement for a participant to have or not have a specific level of skill or expertise. Additionally this non-recited expertise level or lack thereof in the information market does not fundamentally affect the workings of the market (i.e. the method steps or system elements remain the same, the results are predictable) nor would one skilled in the art at the time of the invention not understand that an information market with expert and/or non-expert participants would work fundamentally in the same manner.

While examiner agrees that Kaplan and Sarin appear to suggest that the expertise level of the information market participants is something considered neither Kaplan nor Sarin *anywhere* recite that they *require* or do not require experts for the methods/systems to be functional, as the Applicant's appear to be arguing.

Likewise, while Kaplan and Sarin may suggest that the information may be privately held by individuals and/or historical data (presumable not private held, although this is neither taught nor suggested by either reference) the examiner fails to see the relevance this has to the limitations recited in the instant application. Initially because such a limitation does not exist in the claim and secondly the examiner fails to see how if some of information in the information market was or was not privately held or public would patentably distinguish the invention.

Further the status of information in the information market (which is not claimed) would have no effect on the method steps as currently claimed further the structural elements remain the same regardless of the status of the unclaimed information.

Accordingly the expertise level and/or privacy of information will not distinguish the claimed invention from the prior art in terms of patentability.

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, both Kaplan and Sarin teach a system and method of forecasting wherein both Kaplan and Sarin expressly teach forecasting on a computer system based on aggregating forecasts (participant queries) in order to product a more accurate forecast.

One skilled in the art of forecasting at the time of the invention would have clearly recognized that both Kaplan and Sarin are in the analogous art of forecasting and more specifically forecasting by aggregating the forecasts of multiple participants. The claimed invention is merely a combination of the old elements of Kaplan and Sarin and in the combination each element would merely have performed the same function as it did separately and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Additionally it is noted that an obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some combinations would

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have been obvious where others would not. See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. ___ (2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Scott L Jarrett/

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